Volume 21 Subject Index

ACOUSTICS

Improvements in Sound Velocity Measurement, Marie C. McIntyre. (4): 68-74
NECOR Sea Beam Data Collection and Processing Developments, Robert Tyce et al. (2): 80-92

APPLIED OCEANOGRAPHY

General

Applied Oceanography in the U.S. Coast Guard, Stephen R. Osmer et al. (4): 53-61
Real Time Applied Oceanography at the Navy's Global Center, R. Michael Clancy. (4): 33-46

Specific Applications

Practical Research and Applications Involving Directional Wave Spectra in Offshore Developments, E.G. Ward. (4): 47-52
Simulation of Water Quality Impacts of a Resource Recovery Facility, J.C. Swanson et al. (4): 4-21
Warm Core Ring Prediction, George Milkowski et al. (4): 22-32

ARCTIC ENGINEERING AND TECHNOLOGY

Navigation

Application of Expert Systems to Ice Piloting and Ice Navigation, Richard Voelker et al. (3): 56-63
Remote Sensing in Ice Navigation, Eric D. Leavitt and Greg McAvoy (3): 29-36

Polar Ship Design and Technology

Design Features and Bi-Polar Operation of the Icebreaking Resupply Ship M/V Icebird, Lawrence E. Cosgriff. (3): 48-55
Emerging Polar Ship Technology—An Introduction, Guest Editor, Lawson Brigham. (3): 3-5
Instrumentation for Measuring Ice Forces on Icebreakers, G.A. Ghoneim. (3): 64-67
M/V Arctic-Arctic Vessel Design and Operations, Martin P. Luce. (3): 6-11
The Shirase and Icebreaking Ship Technology in Japan, Kenichi Akai and Shumei Narita. (3): 12-19
Solving Icebreaker Design Problems Using Ice Model Basins, Albert P. Free. (3): 37-47
The Thyssen/Waas Icebreaking Hull Form, V.R. Milano. (3): 75-87

BIOTECHNOLOGY

Marine Biotechnology: Status and Prospects, Saiyed Ahmed and David Attaway. (1): 47-56

CABLES AND CONNECTORS

The Life and Reliability of Underwater Cables and Connectors—Report of the 14th Annual MTS Cable and Connector Committee Workshop, Albert G. Berian. (2): 102-03

COMMENTARY

The Dilemma of the Underwater Service Industry—A Commentary, Andre Galerne. (1): 6-7
President's Editorial: A Call to Arms, Ronald Geer. (1): 2-3

DIVING

General

Industrial and Scientific Diving—An Introduction, Guest Editor, William I. Milwee, Jr. (1): 4-5

Health

Offshore Petroindustrial Diving: Occupational Medicine Considerations, Paul G. Linaweaver, Jr., MD. (1): 14-17

Policy

Lloyd's of London and Undersea Insurance, Veronica Kellett. (1): 36-7

Research

New Undersea Research Opportunities in NOAA, William S. Busch. (1): 19-27

Specific Programs

Commercial Diving in the South China Sea, Liang Shan and Yang Gin-Liang. (1): 28-29
Increasing Effectiveness of Underwater work in Shallow and Cold Water—The Scandinavian Experience, John Graffman and Brent Jansson. (1): 38-46
New Seatopia Project: Current Diving Activities at Japan Marine Science and Technology Center, Takahito Arima et al. (1): 30-35
Norske Shell Deep Diving and Subsea Intervention Studies, W.B. Norton. (1): 8-13

ENVIRONMENTAL QUALITY

Safe Shipping in the Canadian Arctic: Risks and Responsibilities, Cynthia Lamson. (3): 20-28
Simulation of Water Quality Impacts of a Resource Recovery Facility, J.C. Swanson et al. (4): 4-21

INSTRUMENTATION

General

Ocean Science Instrumentation—An Introduction, Guest Editor, H. Lawrence Clark. (2): 3-4
Seafloor Research and Ocean Technology, F.N. Spiess. (2): 5-17

Arctic Applications

Instrumentation for Measuring Ice Forces on Icebreakers, G.A. Ghoneim. (3): 64-74

Design and Technology

High Performance Free-Fall Profiling Vehicles, Albert M. Bradley and Eileen Hoffman. (2): 33-41
In Situ Benthic Flux Measurement Devices: Bottom Lander Technology, W.M. Berelson et al. (2): 26-32
NECOR Sea Beam Data Collection and Processing Development, Robert Tyce et al. (2): 80-92
Technology Developments in Scientific Ocean Drilling, Barry W. Harding. (2): 93-101

Methods and Analysis

Motivations and Methods for Ocean Data Telemetry, Melbourne G. Briscoe and Daniel E. Frye. (2): 42-57
The Optical Determination of Temperature, Pressure, Salinity and Density in Physical Oceanography, George Seaver. (2): 69-79
Particles in Flow, Clarice M. Yentsch and Richard W. Spinrad. (2): 58-68
A Review of Sediment Trap Technique, Vernon L. Asper. (2): 18-25

INTERNATIONAL PROGRAMS AND DEVELOPMENTS

Diving

Commercial Diving in the South China Sea, Liang Shan and Yang Gin-Liang. (1): 28-29
Increasing Effectiveness of Underwater work in Shallow and Cold Water—The Scandinavian Experience, John Graffman and Brent Jansson. (1): 38-46
New Seatopia Project: Current Diving Activities at Japan Marine Science and Technology Center, Takahito Arima et al. (1): 30-35

Polar Ship Technology

Safe Shipping in the Canadian Arctic: Risks and Responsibilities, Cynthia Lamson. (3): 20-28
The Shirase and Icebreaking Ship Technology in Japan, Kenichi Akai and Shumei Narita. (3): 12-19
The Soviet Antarctic Research Vessel, Akademik Fedorov, Lawson Brigham. Technical Note. (3): 88-91
The Thyssen/Waas Icebreaking Hull Form, V.R. Milano. (3): 75-87

LEGAL ISSUES

Lloyd's of London and Undersea Insurance, Veronica Kellett. (1): 36-7

MARINE POLICY

The Dilemma of the Underwater Service Industry—A Commentary, Andre Galerne. (1): 6-7
Safe Shipping in the Canadian Arctic: Risks and Responsibilities, Cynthia Lamson. (3): 20-28

MEASUREMENT SYSTEMS

Improvements in Sound Velocity Measurement, Marie C. McIntyre. (4): 68-74

In Situ Benthic Flux Measurement Devices: Bottom Lander Technology, W.M. Berelson et al. (2): 26-32
Motivations and Methods for Ocean Data Telemetry, Melbourne C. Briscoe and Daniel E. Frye. (2): 42-57
Ocean Waves Monitored by Satellite, R.L. Pickett et al. (4): 62-63
Particles in Flow, Clarice M. Yentsch and Richard W. Spinrad. (2): 58-68
Seafloor Research and Ocean Technology, F.N. Spiess. (2): 5-17
A Review of Sediment Trap Technique, Vernon L. Asper. (2): 18-25

MODELS

Simulation of Water Quality Impacts of a Resource Recovery Facility, J.C. Swanson et al. (4): 4-21
Solving Icebreaker Design Problems Using Ice Model Basins, Albert P. Free. (3): 37-47

NAVIGATION

Application of Expert Systems to Ice Piloting and Ice Navigation, Richard Voelker et al. (3): 56-63
Ocean Waves Monitored by Satellite, R.L. Pickett et al. (4): 62-63
Remote Sensing in Ice Navigation, Eric D. Leavitt and Greg McAvoy. (3): 29-36
Safe Shipping in the Canadian Arctic: Risks and Responsibilities, Cynthia Lamson. (3): 20-28

OFFSHORE OIL AND GAS INDUSTRY

General

Industrial and Scientific Diving—An Introduction, Guest Editor, William I. Milwee, Jr. (1): 4-5

Specific Cases

The Dilemma of the Underwater Service Industry—A Commentary, Andre Galerne. (1): 6-7
Norske Shell Deep Diving and Subsea Intervention Studies, W.B. Norton. (1) 8-13
Offshore Petroindustrial Diving: Occupational Medicine Considerations, Paul G. Linaweaver, Jr., MD. (1): 14-17
Practical Research and Applications Involving Directional Wave Spectra in Offshore Developments, E.G. Ward. (4): 47-52

RESOURCE ASSESSMENT

NECOR Sea Beam Data Collection and Processing Development, Robert Tyce et al. (2): 80-92
Simulation of Water Quality Impacts of a Resource Recovery Facility, J.C. Swanson et al. (4):
Technology Developments in Scientific Ocean Drilling, Barry W. Harding. (2): 93-101

SATELLITE AND AIRCRAFT REMOTE SENSING

Ocean Waves Monitored by Satelite, R.L. Pickett et al. (4): 62-63
Remote Sensing in Ice Navigation, Eric D. Leavitt and Greg McAvoy. (3): 29-36
Warm Core Ring Prediction, George Milkowski et al. (4):

STUDENT PAPERS

Improvements in Sound Velocity Measurement, Marie C. McIntyre. (4): 68-74

TECHNICAL NOTES

The Life and Reliability of Underwater cables and Connectors—Report of the 14th Annual Marine Technology Society Cable and Connector Committee Workshop, Albert G. Berian. (2): 102-103
Ocean Waves Monitored by Satellite, R.L. Pickett et al. (4): 62-63
Solitons, Tidal Bores, Tsunamis and Other Freak Waves, Robert Irving. (4): 64-66
The Soviet Antarctic Research Vessel, Akademik Fedorov, Lawson Brigham. (3): 88-91

UNDERWATER VEHICLES

Commercial Diving in the South China Sea, Liang Shan and Yang Gin-Liang. (1): 28-29
Increasing Effectiveness of Underwater Work in Shallow and Cold Water—The Scandinavian Experience, John Graffman and Brent Jansson. (1): 38-46
Lloyd's of London and Undersea Insurance, Veronica Kellet. (1): 36-37
New Seatopia Project: Current Diving Activities at Japan Marine Science and Technology Center, Takahito Arima et al. (1): 30-34
New Undersea Research Opportunities in NOAA, William S. Busch. (1): 19-27
Norske Shell Deep Diving and Subsea Intervention Studies, W.B. Norton. (1): 8-13
Offshore Petroindustrial Diving: Occupational Medicine Considerations, Paul G. Linaweaver, Jr. MD. (1): 14-17

WAVES AND CURRENTS

Ocean Waves Monitored by Satellite, R.L. Pickett et al. (4): 62-63
Solitions, Tidal Bores, Tsunamis and Other Freak Waves, Robert Irving. (4): 64-66
Warm Core Ring Prediction, George Milkowski et al. (4): 22-32

Volume 21 Author Index

Ahmed, Saiyed (1) 47-56
Akai, Kenichi (3) 12-19
Aoki, Akira (1) 30-35
Arima, Takahito (1) 30-35
Asper, Vernon L. (2) 18-25
Attaway, David (1) 47-56
Berelson, W.M. (2) 26-32
Berian, Albert G. (2) 102-103
Bishop, Joseph M. (4) 3
Bradley, Albert M. (2) 33-41
Brigham, Lawson (3) 3-5, 88-91
Briscoe, Melbourne C. (2) 42-57
Burns, D.A. (4) 62-63
Busch, William S. (1) 19-27
Clancy, R. Michael (4) 33-46
Clark, H. Lawrence (2) 3-4
Cornillon, Peter (4) 22-31
Cosgriff, Lawrence E. (3) 48-55
Daley, C.G. (3) 56-63
Devol, A.H. (2) 26-32
Ferguson, Scott (2) 80-92
Free, Albert P. (3) 37-47
Frye, Daniel E. (2) 42-57
Galerne, Andre (1) 6-7
Geer, Ronald (1) 2-3
Ghoneim, G.A. (3) 64-74
Gin-Liang, Yang (1) 28-29
Glen, I.F. (3) 56-63
Glenn, Scott (4) 22-31
Graffman, John (1) 38-46
Hammond, D.E. (2) 26-32
Harding, Barry W. (2) 93-101
Hinga, K.R. (2) 26-32
Hofmann, Eileen E. (2) 33-41
Irving, Robert (4) 64-66
Isaji, Tatsu (4) 4-21
Jhanke, R.A. (2) 26-32
Johnson, C.H., Jr. (4) 62-63
Kellett, Veronica (1) 36-37
Lamson, Cynthia (3) 20-28
Leavitt, Eric D. (3) 29-36
Lemmond, Peter (2) 80-92
Linaweaver, Paul G., Jr. M.D. (1) 14-18
Lissauer, Ivan M. (4) 53-61
Luce, Martin P. (3) 6-11
McAvoy, Greg (3) 29-36
McIntyre, Marie C. (4)
Mendelsohn, Daniel (4) 4-21
Milano, V.R. (3) 75-87
Milkowski, George (4) 21-31
Milwee, William I., Jr. (1) 4-5
Murphy, Donald L. (4) 53-61
Narita, Shumei (3) 12-19
Norton, W.B. (1) 8-13
Okamoto, Mineo (1) 30-35
Osmer, Stephen R. (4) 53-61
Pickett, R.L. (4) 62-63
Rowe, G.T. (2) 26-32
Sayles, F. (2) 26-32
Seaver, George (2) 69-79
Shan, Liang (1) 28-29
Smith, K.L., Jr. (2) 26-32
Speiss, F.N. (2) 5-17
Spinrad, Richard W. (2) 58-68
Swanson, J. Craig (4) 4-21
Tyce, Robert (2) 80-92
Voelker, Richard (3) 56-63
Ward, E.G. (4) 47-52
Yentsch, Clarice M. (2) 58-68